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Deposited in DRO:

15 July 2014

Version of attached file:

Accepted Version

Peer-review status of attached file:

Peer-reviewed

Citation for published item:

Hirst, A. and Humphreys, M. (2015) 'Configurable bureaucracy and the making of the modular man.', *Organization studies*, 36 (11). pp. 1531-1553.

Further information on publisher's website:

<http://dx.doi.org/10.1177/0170840615593585>

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Configurable bureaucracy and the making of Modular Man

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Abstract

Modern people possess the capacity to divide themselves into separate modules of thought and action, and deploy them flexibly (Gellner, 1994). The employment relationship, which divides the tasks and skills required for the job role from the rest of the person, has always relied upon this modular capacity (Kallinikos, 2003). The growing practice of 'informatizing' work by representing tasks as software-based instructions entails the modular design and management of work, because software itself has a modular form. We investigate the implications of the modular design of work in the empirical context of a 'shared service centre', where professional service work was informatized. We make three contributions. First, transforming work into software-based processes makes organizations configurable, because work can be treated as an arrangement of modules which can be adapted, replicated or deleted, irrespective of the professional expertise of employees. Second, this way of organizing demands that employees attempt to deploy enhanced modular capabilities: they must be able to execute any given set of processes, and adapt instantaneously to changing circumstances, by setting aside modules that are no longer required and engaging competently with new ones, all in a strictly unemotional and time-efficient fashion. Third, we argue that under circumstances of financial pressure, the continuing availability of sophisticated software which can be used to informatize complex work, and the existence of established organizational templates which accommodate standardized service work, the modular design and management of other types of professional services may become increasingly common.

Keywords

Modular man, role, flexibility, bureaucracy, informatization, professional service work, public sector reform

Introduction

The world of work we investigate in this paper is a shared service centre (SSC) providing human resource (HR), IT and financial services to a UK local authority. The centre had been created by superimposing a series of radical organizational changes: service functions that were formerly integrated within council directorates were brought together, a private sector partner was involved to re-engineer work processes and transpose them onto software, and the new grouping of standardized services was outsourced within a new private company which could then sell the services to a much wider range of clients. We focus on the transition from specialist to generic services that was achieved by transforming work into the enactment of predefined, software-based business processes, and the implications of this change in terms of the redefinition of the employment relationship and the increased organizational flexibility it enabled.

The creation of SSCs by extracting ‘back office’ functions from specific organizational contexts and reconstituting them as IT-enabled, standardized provision, is a model that has been widely adopted and endorsed in both private and public sectors in the UK (Cabinet Office, 2011; CBI, 2012), and forms an important strategy for cost-reduction in ‘New Public Management’ type reforms (HMSO, 2004). Howcroft and Richardson’s (2012) analysis of several SSCs reveals that while they assumed a variety of structures, contractual arrangements and spatial configurations, all were marked by an unusual degree and frequency of organizational change. The authors attribute the churn, frequent redundancy programmes and regional and international relocation they observed to the use of sophisticated IT systems to standardize highly skilled work. Standardization removed dependence on individual workers’ skills, led to deskilling and reduced labour costs, and also meant that work could be switched between locations and even between organizations. Howcroft and Richardson (2012) conclude that ‘the greater the degree of standardization, then the greater the scope for reconfiguration’ (p. 112).

The ‘informatization’ of work (i.e. the use of IT to conduct and manage work) that the provision of shared services depends upon is a widespread trend. Although the use of IT presents opportunities as well as threats to job quality (Rubery and Grimshaw, 2001), empirical studies of informatized frontline service provision indicate a tendency towards: highly rationalized models with reduced engagement between customers and providers (Bélanger and Edwards, 2013); Taylorization, micro-management and automatic ‘speed-up’ (Bain and Taylor, 1999; Head, 2003); and inefficiency arising from ‘failure demand’ when standard processes cannot cope with non-standard problems (Seddon, 2008). Baldry’s (2011) retrospective review concludes that the main outcomes of integrating IT into work have been reduced discretion, the intensification of work and a greatly increased capacity for managerial surveillance, and notes evidence of ‘a new harshness’ (p. 179) in management. Although back office, shared service work has received comparatively little attention, perhaps because of its backstage nature, SSCs are worthy of study because of the deskilling of professional work that accompanies their creation and the considerable capacity for change that these organizations seem to possess (Howcroft and Richardson, 2012).

Kallinikos (2006a) argues that the conversion of more and more types of work into software-based processes has profound consequences, for the micro-practices used to conduct work and for wider patterns of organizational and social change. These consequences stem from the intrinsically modular nature of software. Transposing tasks onto software does not create a virtual replica of previous tasks. Rather, informatization involves a long and detailed analytic process of breaking down whole tasks into tiny digital steps which are then cleansed of ambiguities and reconstituted into sequences of instructions (Kallinikos, 2009). Consequently, the practical accomplishment of software-based tasks requires the ‘fine grained and modular division of labour’ (Kallinikos, 2011a, p. 138). Tasks in the form of digital modules can then be reshuffled into new combinations to make new tasks, roles, and organizations that can be replicated across contexts, thus laying down new organizational templates that can be consolidated, copied and institutionalized (Kallinikos, 2006b). As Kallinikos (2011b) argues, IT is a form of regulation which intervenes in organizational structures, norms and employment relationships, but its implications have not so far been systematically investigated.

An inductive, exploratory case study of the formation of a new SSC, ‘FirstService’ (all names are pseudonyms), gave us the opportunity to investigate how the informatization of professional service work changed work and employment relationships, and increased the scope for organizational flexibility. Our analysis of the change from specialist to generic services in FirstService is part of a wider investigation of attempts to modernize a UK

local authority, Western County Council (WCC), by introducing new integrated workspaces and technologies. FirstService was created through a partnership between WCC and Telecom, a privatized telecommunications company. Most FirstService staff had previously worked within specific council directorates as specialists (for example, organising the recruitment of child protection staff). When FirstService was set up, the staff were seconded to the new organization and their work was redefined in terms of business processes which aimed to enable employees to provide generic services to any purchaser. This enabled remarkable degrees of task, job and organizational flexibility as managers routinely adapted and reallocated work processes in a way that left employees regularly surprised when their role was changed profoundly and without notice, leading to mutual distrust between managers and employees.

We use Gellner's (1994) concept of 'modular man' to analyse the changes in FirstService. Modular man is a product of modern civil society with the ability to compartmentalize thought and action into separate modules which can be deployed flexibly. Like modular furniture, he (Gellner always refers to modular 'man') 'comes in bits which are agglutinative ... You can combine and recombine the bits at will' (p.97). Kallinikos (2003, 2004) develops Gellner's concept of modularity to argue that organizations are composed, not from 'whole' persons, but from 'non-inclusive' roles, into which the tasks and skills required for the job are packaged, and from which all personal trappings not relevant to organizational performance are excluded. Modularity endows bureaucracy with intrinsic flexibility (contrary to popular assumptions that it is rigid) because non-inclusive roles can easily be changed, reshuffled or deleted to meet the changing circumstances confronting the organization.

We make three main contributions. First, we show how converting work into software-based processes entails a modular design of job roles and tasks, which makes organizations easy to reconfigure. Configurability is enabled because modules can be manipulated by adapting, reshuffling or deleting them. A distinctive feature of this form of flexibility is that roles can be adapted in ways that disregard employees' professional expertise. This potentially enables staff numbers to be reduced while maintaining a workforce capable of responding to a wide variety of demands, because staff resources are pooled, not contained within rigid professional boundaries or reliant on relevant bodies of knowledge. Second, we identify a series of associated changes that this way of organizing demands of staff, all of which accord with Gellner's (1994) description of modular man. Rather than relying on their professional knowledge to conduct work, employees must be able to follow processes competently, irrespective of their content. Staff may also be expected to adapt to change instantaneously, by putting aside modules that are no longer required and engaging expertly with new ones. Third, taking into

account the relationship between our case and its context, and relevant empirical evidence, we speculate about the extent to which the changes in our case represent wider organizational trends. We suggest that under circumstances of financial pressure, the continuing availability of sophisticated software which can be used to informatize complex work, and the existence of established organizational templates which accommodate standardized service work, the modular design and management of professional service work may become increasingly common.

We begin the rest of the paper by reviewing three relevant streams of literature. These consider, first, SSCs within the context of public sector reform; second, historical changes to the employment relationship and their association with the distinctive modular forms of agency possessed by modern people; and third, the modular property of software and its implications for sociomaterial practices and organizational change. Turning to the present study, we then describe the empirical setting and research design. The case which follows is presented chronologically, and considers the contrast between the way specialized and generic services were organized in FirstService, and wider consequences of this change. In the discussion, we use the concept of modularity to analyse the case, and consider how this concept may be developed by it.

Shared service centres, public sector reform and the informatization of professional service work

‘New Public Management’ (NPM) reforms which have been applied to the UK public sector over the past four decades have adopted a diverse range of strategies, but have always sought to reduce or eliminate ‘bureaucracy’ (e.g. Clark and Newman, 1997; Hood, 1991; Newman, 2002). In practice, reforms are usually implemented as national, multi-faceted, composite programmes which are augmented or changed over time (Bejerot and Hasselbladh, 2013). The emergence and growth of SSCs have followed this general pattern of development, having resulted from the overlaying of a variety of reform strategies originating at different times: outsourcing, restructuring, the involvement of private sector partners, business process re-engineering (BPR) and the use of IT to orchestrate work and conduct relationships with the public. SSCs initially emerged as Public-Private Partnerships (PPPs), a vehicle designed to attract private sector investment and expertise, and enable private and public partners to contribute their complementary strengths to cut costs and deliver improved services (Grimshaw, Vincent and Willmott, 2002).

One of the significant objectives that PPPs aimed to achieve was to enable a shift to ‘e-government’ - the intensive use of IT to carry out organizational functions and transactions with citizens (Snellen, 2005). E-government entailed a redesign of local authorities away from departments in favour of organizational structures configured to fit the anticipated needs of customers. The structural template that has been widely adopted includes a ‘front office’ or customer contact centre, where customer relationship management systems are used to handle enquiries, and a back office, created by lifting out and merging previously separate service departments (typically, HR, IT, finance and procurement), and using BPR to standardize and reorient work processes (McNulty and Ferlie, 2004). Standardization enables back offices to provide ‘shared’ support services to any frontline members of staff, and also allows services to be sold to a wider pool of client organizations. In 2004, the Gershon Efficiency Review (HMSO, 2004) identified the back office as a priority area for making significant savings by simplifying and standardizing processes, thus avoiding direct cuts to frontline services. More recently, the UK Coalition Government reiterated its commitment to simplifying and standardizing back office services in the context of ‘austerity’, arguing that the shared services model had already led to the realization of substantial savings in central government departments, as well as driving improvements to service quality and operational efficiency (Cabinet Office, 2011).

Rationalizing professional practices in this way is a significant approach to public sector reform (Bejerot and Hasselbladh, 2013). This approach targets ‘horizontal’ work regimes, such as professional practices and norms, which span sites, organizations and countries, and are not straightforwardly amenable to hierarchically-imposed changes. Attempts to rationalize practices are based on ‘evidence-based knowledge, the standardization of specific professional activities, and the constant comparison of outcomes’ (p. 1365). Empirical studies of the IT-enabled rationalization of professional services suggest two broad findings. First, work regarded as routine and/or low status seems more likely to be earmarked for rationalization (Bélanger and Edwards, 2013; Bloomfield and Hayes, 2009). The second finding concerns the way that work changes when it is informatized. Consistent with the evidence from frontline service work, professional work also shifts to a micro-managed, scripted process, and the loss of ‘activities that made the [workers’] role meaningful and gave them status’ (Eriksson-Zetterquist, Lindberg & Styrhe, 2009, p. 1163). Technology also intervenes by conveying particular norms through daily use, such as an ethos of customer service (Bloomfield and Hayes, 2009).

The employment relationship and Modular Man

So far, we have considered the shared services model as an outcome of recent attempts to reform public sector bureaucracies, and in the context of rationalizing services in general. However, as Kallinikos (2006b) recognizes, the legal-rational regulative regime of bureaucracy is not confined to the public sector or even to organizations, but underpins the formal character of modern life. It is useful therefore to analyse shared service centres and their unusual capacity for flexibility within the wider context of modern social order, and the patterns of continuity and change that it exhibits.

For most of the 20th century, the standard form of employment relationship adopted in the industrialized nations was the open-ended employment contract (Marsden, 1999). Marsden attributes the success of the open-ended contract to the way it allows job roles to be defined that fall within the 'area of acceptance' (Simon, 1951), the subset of all the possible tasks that can be asked of the employee, which satisfies both the employer's need for flexibility and the employee's need for protection from unreasonable demands. Marsden (1999) goes on to identify two mutually exclusive 'rules' for designing the content of job roles which will fall within the area of acceptance. With the 'production' approach, the content of the job is moulded around the needs of the production process, and relevant training takes place on the job. The second broad approach to job design is the 'training' approach, where tasks are defined in a way that reflects occupational skills available in the labour market, so that training is off the job and may precede it. The ability to deploy labour flexibly by adapting job roles, albeit within limits, gives employers a 'formidable advantage' (Marsden, 1999, p. 3), because it helps them cope with varying demands while avoiding either a surplus or shortfall of labour. The open-ended contract is also consolidated into a wider 'employment system', in which a range of institutions, including the collective organization of employers and employees, governments and educational bodies, articulate together (Edwards, 2003). The smooth articulation between institutions has sustained enduring employment relationships and steady career development patterns, thus supporting the production of 'a *solid individual* capable of constantly assimilating and accumulating the lessons of a long-lasting occupational journey' (Kallinikos, 2003, p. 600; italics original).

During the previous thirty years or so, pressures exerted by globalization, entrepreneurialism and informationalism have posed challenges to bureaucratic structures, processes and ethics (Courpasson & Reed, 2004), and have been associated with divergent variations in employment contracts, including short term project work (Marsden, 2004), the blurring of the boundary between work and non-work time, such as with 'zero hours' contracts (Rubery, Ward, Grimshaw and Beynon, 2005), and telework (Brocklehurst, 2001; Hislop and Axtell,

2007). Following White, Hill, Mills & Smeaton (2004), Watson (2009) argues that while industrial capitalism continues to be the basic logic of social organization, there is now an 'ultra-competitive world' where intense international competition drives a constant search for ways to increase both the cost-effectiveness of labour and its capacity to produce innovation. This places a premium on workers' flexibility, malleability and adaptability (Kallinikos, 2003).

Kallinikos (2003, 2004, 2006a) argues that much contemporary flexibility rests on an anthropological innovation that coincided with the advent of modern society. He draws attention to Gellner's (1994) insight that the shift from integrated, *Gemeinschaft* society to modern civil society was enabled and accompanied by the emergence of 'modular man', a person composed of a patchwork of separate modules which he or she can deploy flexibly. This change in human agency enabled people to deal with separate institutional domains such as work, family, religion and community, and was a pre-condition of what Gellner calls 'the industrial miracle' (p. 103). Modular people can enact the modules they are made from one at a time, suspending any not relevant to the current purpose, and can also add and subtract modules as needed, giving rise to flexibility and the easy achievement of technical and aesthetic coherence.

Modularity is predicated on a shift from multi-stranded thinking, which bundles together facts and expressions of loyalty to the social order, to single-stranded thinking, which separates social strands into independent domains (Haugaard, 2007). Single-strandedness enables the modern thinker to 'hold a single interpretation through a complex process of rational deliberation without allowing interference from alternative interpretive horizons' (Haugaard, 2007, p. 92) and thus to carry out 'methodological bracketing' (p. 93), the capacity to set aside all extraneous elements. As Ryan (2007) puts it, this style of cognition is one which 'treats all cases in a like manner, attends as far as possible only to the facts of the case, and ignores as far as possible the rich social context' (p. 230-231). This capacity is deployed, for example, by the dispassionate bureaucrat when dealing with a client whom they also know personally. Single-strandedness may only be achieved imperfectly and with difficulty (especially when personal or rich information pertaining to the client is available). However, bureaucratic impartiality, albeit imperfect, is recognized as a key resource enabling the fair allocation of public services (du Gay, 2000; Hoggett, 2005).

In a society populated by modular people, a standardized conceptual currency supplants local culture, enabling communication between remote, anonymous actors. The multifarious, sticky bonds of pre-modern society are replaced by single, reversible bonds, and this creates the potential for social change. As Gellner (1994) writes, it

is ‘the non-conflation of issues, the separation of the social strands, which makes society non-rigid’ (p. 103). This type of society is meritocratic, with access to jobs based on formal merits and skills acquired through education and experience rather than position in the social hierarchy (Kallinikos, 2003). And, as Kallinikos (2006b) also points out, many of our social transactions are with strangers, and we expect them to be conducted in a smooth and frictionless fashion. Modularity is therefore deeply embedded in the modern institutional landscape, and underpins the articulation between different domains. Gellner (1994) acknowledges that modularity has a price - a warm, integrated, but stifling ‘total’ culture is replaced by fragmentation, cultural homogeneity, standardization of expression and the substitutability of people. Nonetheless, the social bonds between modular people function well enough to make civil society ‘work’. As Gellner (1994) declares, ‘these highly specific, unsanctified, instrumental revocable links or bonds are effective! The associations of modular man can be effective without being rigid!’ (p. 100).

The ability of modern people to partition themselves into modules is deployed as a basic design principle of bureaucratic organizations. As Kallinikos (2004) points out, a taken-for-granted feature of job roles is that they are ‘non-inclusive’, i.e. they specify the tasks to be performed and the skills required, and systematically exclude all other aspects of people ‘in their full-blown cognitive, emotional and social complexity’ (p. 21). Kallinikos argues that the Weberian ideal type should not be taken to define bureaucracy, but is better understood as a set of secondary phenomena that arise when particular configurations of roles are adopted. Rather, non-inclusivity is the defining feature of the modern employment relationship and non-inclusive roles the fundamental building blocks from which organizations are constructed. As Kallinikos (2004) writes:

Organizations are not made of individuals distributed over a complex landscape of job positions but of patterns built by those abstract operational requirements we call roles. Roles are enacted by the intrinsically modern capacity of contemporary humans *to systematically and consistently suspend* all other personal or organizational aspects that do not bear upon the role and to undertake action ... along delimited and well-specified paths. (p. 21; italics original).

According to Kallinikos (2004), non-inclusive roles have three characteristics. First, they are *selective*, because they divide the role from all other aspects of people’s lives. Second, roles are *mobile*: because a role is ‘an abstract set of functional requirements’ (p. 24) it can be unleashed from the circumstances in which it was derived and replicated across new organizational contexts. Third, roles are *reversible*, because they can be redesigned or withdrawn. Thus, if bureaucracy is understood as a configuration of selective, mobile, reversible

job roles, it can be seen as intrinsically flexible because ‘roles can be adapted, modified, redesigned, abandoned or reshuffled to address the emerging technical, social and economic demands the organization is facing’ (Kallinikos, 2004, p. 23). And, drawing on the competence in modularity possessed by modern people, organizational change can be freed from ‘the indolence of the human body’ (p. 13) and ‘the languid process of personal or psychological reorientation’ (p. 27).

Many studies have considered how change can be achieved by altering the content of jobs (using the reversible property of roles), as Marsden (1999) does when analysing the flexibility afforded by the open-ended contract. Other ways of manipulating roles have always been exploited, however. For instance, Hyman’s (1997) distinction between status and contract defines contract as ‘flexibility through disposability’ (p. 323). We must also acknowledge, as Kallinikos (2004) does, that the extent to which the person can be separated from the role is ‘a delicate issue’ (p. 26). There is much evidence that separation is often not accomplished in practice. A similar reservation is expressed by Rawls (2008), who recognizes the importance of Kallinikos’ argument but points out that it ‘faces the criticism that it eliminates agency, reducing it to role’ (p. 717). The job role is, therefore, a profoundly consequential modular artefact, based on the fundamental separation it envisages, but one which cannot be assumed to eliminate agency.

Informatization and the expansion of modularity

The ways in which modular artefacts participate in work routines and the institutionalization of new practices are considered in recent research on sociomateriality. This proceeds from the assumptions that all social practices are always material, and that the material world makes human agency and choice possible (Faulkner and Runde 2012; Kallinikos, Leonardi & Nardi, 2012; Leonardi and Barley, 2010; Orlikowski, 2007). The term ‘sociomaterial’, Leonardi (2012) stresses, refers to the shared practices that become embedded as people engage with the enduring material features of artefacts. This position forces us to re-examine the assumption that humans and artefacts are ontologically distinct. As Nardi (2011) writes, ‘[t]echnology is not exogenous to human agency ... technologies cultivate and bring forth our selves, rather than standing apart from those selves’ (p. xi).

Organizational information systems are particularly interesting modular artefacts because of their participation in a massively expanding range of detailed work processes (Kallinikos, 2006b). To understand how information

technologies contribute to organizing, it is necessary to consider how they are made and the distinctive opportunities and constraints they bring to sociomaterial practices. ‘Whole’ work tasks are converted into software by passing them through successive stages of increasingly detailed analysis, and sifting out the ambiguities and inconsistencies present *in situ*. This analytic process creates tiny steps captured as algorithms, which can then be composed into a software-based version of the original task, or recombined flexibly to create new ones. Consequently, computational technology and the data it handles are intrinsically ‘modular and granular’ (Kallinikos, 2011a, p. 135) and ‘[provide] for the fine-grained and modular division of labour’ (p. 138). The ability to dissolve work into software-based elements also shines a bright light on the capacity to construct organizations as patterns of roles which can be adapted, recombined, replicated and deleted. The modular property of software thus invites certain actions, such as the assembly of new functions and their packaging into new, autonomous organizational envelopes. Kallinikos (2011a) attributes the growth of service outsourcing to ‘a new technological paradigm of resource dispersion, recombability, and distribution’ (p. 137) that computation offers.

Social construction happens in different ways and at different points in the lifecycles of digital artefacts, as they are designed, used, modified and abandoned (Orlikowski and Yates, 2002). When in use, though, software is shielded from inexpert intervention behind the user interface, ‘backstaged ... beyond the inspection, understanding and manipulative ability of situated agents’ (Kallinikos, Hasselbladh and Marton, 2013, p. 398). Studies of technology in use reveal variation across contexts (Labatut, Aggeri & Girard, 2012; Orlikowski, 2007) as users put systems to unanticipated uses or develop workarounds such as ‘lying’ to the computer (Russell, 2009). However, a consequence of the replicable property of software is that the designs of work that it prescribes can be reproduced across contexts, enabling these designs to be consolidated into future patterns of institutional change (Kallinikos, 2013). Given the expanding presence of information systems in work and their position at the heart of work processes, people’s capacity for modularity may now be an important resource which potentially facilitates the take-up and institutionalization of such systems. Our case deals with the introduction of such a system, and analyses the consequences for employees of the transition to a more modular division of labour.

Research design

Empirical setting

This empirical investigation is an exploratory case study of a single SSC, FirstService, and the local authority it traded with, WCC. Since the early 1970s, WCC had a reasonably stable organization structure, typical of local authorities, comprising seven directorates providing services to the public: Adult Social Care, Children and Young People, Environment and Transport, Libraries and Heritage, Fire and Rescue, Democratic Services and Economic Development. Senior staff from each directorate were based in **Weston, the county town, in** their own 'headquarters' buildings, together with supporting employees who provided HR, Finance and IT services. These support services were 'specialist', i.e., were designed to meet the particular needs of each directorate.

During the previous 10 years, radical changes were made to WCC's organization structure and material environment. Senior staff were brought together in a new 'strategic centre' office **in Weston**; back office services were outsourced into FirstService and located in a separate building **nearby**; and the workspaces of both 'strategic' and back office employees were transformed into what Schwarz (2003) calls 'techno-spatial hybrids' (p. 93), open plan office space formatted by electronic technology. Consistent with central government's reform strategies, official intentions expressed by WCC's senior managers were that the new arrangements would support customer-centred, lateral organizing. These contemporaneous changes placed WCC at the forefront of central government policy and made it an interesting site for researching public sector reform. The wider research project addressed the broad question, 'how do artefacts participate in the institutionalization of new organizational processes?' A conceptual framework was assembled in which new artefacts were seen as attempts to change sociomaterial practices, individuals' implicit contracts, and thus WCC's negotiated order (Strauss, 1978). This framework provided a loose bundle of concepts which acted as 'a 'first cut' or guide to getting started' (Alvesson and Deetz, 2000, p. 30) but which remained open to redefinition as the research proceeded.

The partners in FirstService were WCC and Telecom. The aims were to help the Council to achieve its e-government obligations and reduce back office costs, by centralizing and standardizing what were officially referred to as 'disparate' functions distributed across departments. The approach adopted was to use BPR to streamline activities and maximise 'Economic Value Added' (Grimshaw, Marchington, Rubery and Willmott, 2005). Telecom invested £50 million in IT infrastructure and 'credible business process change management' in the early stages of the partnership. Specialised HR, IT and Finance services were replaced by standardized services inscribed on a common IT system or 'convergence platform'. Standardized, 'generic' services enabled FirstService to trade with WCC and other local authorities, so that Telecom could recover its investment and

thereafter make a profit. The importance of generic services was stressed in FirstService's official values, which stated '*We have a model for service delivery which can be used anywhere*'.

The new company was managed by a Corporate Management Team (CMT) comprising representatives from both partners. Seven hundred staff were seconded from the local authority to FirstService, rather than transferring directly under Transfer of Undertakings Protection of Employment (TUPE) regulations. A brief 'case study' used by Telecom to promote the partnership states that secondment enabled the staff to '*retain their employment continuity with the authority in order to provide comfort and security*'. Initially, all staff were secondees. However, as time progressed, a growing population of new staff emerged, who were employed directly to fill specific vacancies. Many of these 'new' staff had formerly worked for X-En, a local privatized energy company which had recently gone into administration. X-En's privatization had included a BPR initiative similar to the one undertaken in FirstService, so that its former employees typically brought several years' experience of working in this way.

Fieldwork and analysis

The empirical research was carried out by the first author in an ethnographic study spread over a period of three years, and including two phases of intensive participant-observation and interviewing, **lasting seven and eight months**. Access to all the local authority's sites, including FirstService, was granted by the Chief Executive of WCC. Two circumstances appeared to facilitate access. First, the researcher already had access to the organization as a management lecturer, and in this capacity had been entrusted with sensitive information. Second, the authority was regarded as a forerunner in its approach to modernization, and senior managers seemed to embrace the research in a spirit of confidence. Research access appeared to form part of a 'strategic exchange' (Watson, 1994), whereby access to the organization as a research site was granted by senior managers in exchange for useful, anonymized information about the consequences of their change initiatives.

Data are drawn from semi-structured interviews, participant-observation, and official and unofficial documents. The conceptual framework was used as the basis for an interview schedule which focused on the informants' roles, work routines, priorities and key working relationships; how organizational artefacts participated in their work, what processes they enabled or constrained, and how employees responded to both. As Leonardi and

Barley (2010) suggest, interest was focused on ‘what a technology lets users do, what it does not let them do, and to the workarounds that users develop to address the latter’ (p. 34-35).

In order to consider FirstService in its wider context of the local authority ‘client’ relationship, interview informants for this paper were based in both FirstService and WCC. Interviews were secured by direct approaches to known managers, by open invitation on the intranet, and by recommendation or ‘snowballing’. There were 46 semi-structured interviews with a total of 40 employees, and 15 of these were with FirstService staff, working in IT (8), HR (5) and Finance (2) services. Key informants were the two gatekeepers for the project, who worked in HR (based in FirstService) and the Workspace Improvement Team (WIT, based in WCC). The WIT was a new unit created to oversee the design and use of the new, technologically-oriented workspace and to promote associated cultural change. Interviews lasted between 55 minutes and 2 hours, were recorded using a digital recorder and transcribed in full. The length of interview transcripts ranged from 7,500–12,000 words.

Although the informants included a high proportion of middle managers, the researcher’s repeated attempts to secure interviews with FirstService’s CMT members and its externally-recruited population of staff were unsuccessful. This is a limitation of the study, because an important part of CMT’s role was to manage the design and implementation of the new business process model, and because the externally recruited staff appeared enthusiastic about it. However, all FirstService employees had to account for all their work time, and participation in interviews had to be officially recorded as ‘non-productive time’. Some employees who were approached explicitly stated that they preferred not to spend time non-productively. In addition, as it turned out, some issues were sensitive and the senior managers may have been reluctant to discuss them. The strategic exchange (Watson, 1994) that had enabled access from the senior local authority managers was not, apparently, of interest to these staff groups. The WIT members who did take part in the study expressed strong support for using the new workspace as a means to greater organizational flexibility, and we have included an account from them in the case that follows.

Participant-observation took place during the two intensive phases of fieldwork, and a further 12 observational data-gathering visits were made between them. The researcher was provided with a telephone and IT profile which enabled her to use any workstation. Access to the business processes used in FirstService was not provided, however. Thus, the researcher was an ‘observer-as-participant’ (Gold, 1958), lacking first-hand knowledge of using the new system. As well as conducting workshops with managers/ students, she attended

formal meetings (e.g. council meetings and a senior managers' 'roadshow') and informal meetings (e.g. over lunch or at a retirement 'do'). Fieldnotes were compiled throughout the period, recording details of events and conversations, and how artefacts such as computers, files, storage cabinets (etc.) participated in them.

Data derived from interviews, fieldnotes and documents ran to some 500,000 words of research material.

Analysis was initially shaped by the observation that the way work was designed and conducted in FirstService differed strikingly, both from the strategic centre, and from how services had been provided in the past, when they were still specialized. Informants appeared surprised and unsettled by the abrupt changes to the design and content of their work that were now possible. Both official and unofficial accounts suggested that the re-engineering of work that had taken place in FirstService played a significant role in this change. Data were initially coded in a naturalistic manner (Gubrium and Holstein, 1997) using a mixture of theoretically-derived codes (e.g., 'change to implicit contract') and those derived from the data (e.g., 'change to role'). Thereafter the analysis followed a process of abductive reasoning (Van Maanen, Sørensen and Mitchell, 2007), involving continuous interplay between conceptual resources and empirical materials 'to shape a conceptual apparatus that makes theoretical sense of the research puzzles arising in the field' (Watson and Watson, 2012, p.685). In particular, Kallinikos' (2004) analysis of organizations as configurations of modular job roles provided a theory that explained the nature, diversity and speed of flexibility observed in FirstService, because this could only be achieved if work was structured in modular form. This insight enabled the first order codes to be integrated into a wider framework based on the selective, reversible and mobile properties of roles, and the consequences of treating work and employees as such. On this basis, we have sought to derive analytic generalizations, 'theories, in effect – about 'how things work' in the setting being studied' (Watson and Watson, 2012, p. 685).

There are of course limitations to our case, whereby important aspects have remained opaque. These include the powerful CMT group, the new staff, and the business processes themselves. Similar restrictions on research access to sensitive issues have been experienced in other studies of public sector informatization (e.g. Bloomfield and Hayes, 2009). Further, FirstService and WCC may not be representative of the wider populations of SSCs and UK local authorities, and we cannot make empirical generalizations from the case based on a simple 'sample-to-population' logic (Yin, 2013). However, detailed examination of organizational processes and their context can help specify the conditions under which particular processes might occur, enabling a generalization to be made about the relationships between specific processes and circumstances

(Gläser and Laudel, 2013; Hartley, 1994). It is then possible to identify similar concrete situations where such generalizations may also pertain (Yin, 2013).

Before FirstService: providing specialist services

Prior to joining FirstService, HR, IT and Finance employees were embedded within local authority directorates. They formed lasting relationships with their colleagues in the host directorate through repeated joint working, and acquired specialist knowledge through this experience. Thus, service professionals developed dual expertise, in both their service function and in the directorate function in which they were based. Dual expertise was frequently a reflection of their longer-term career patterns. Some service employees had previously worked as mainstream staff in their directorate, and some held professional qualifications in both areas. For example, one informant first practised as a social worker before going on to qualify as a business analyst providing IT services to social workers.

In the first phase of fieldwork, employees offered few evaluative comments about their work routines. This may be because these routines were long-established and were perhaps seen as simply the way things were done. However, the way specialist services had been provided was placed in sharp relief in the light of the changes introduced by FirstService, and in the second phase of fieldwork more employees reflected explicitly on the contrast between their current and former working practices. Under the 'old' system, work was allocated and managed mainly through regular, face-to-face meetings. As Luke (Business Analyst, IT) described:

Each department like ACS [Adult Social Care] and so on had their own IT, and I was part of ACS IT. So our world was just about Social Care, that's all we worried about. And the way we allocated work was that every week we would all sit down and the manager says, 'we've got these projects, Mrs Thing needs da-da-da, Mr Thing needs da-da-da, who fancies what?' And somebody might go, 'oh, I did a piece of work on that, I can tell you all about it'. Or they might say, 'oh I've heard of him, I'm not having him again!' It's anecdotal a lot of it, and some of it may actually be dangerous information in that it may give you a preconception about the type of people that you're going to meet. But as long as you know that, you know, all the information is useful.

These regular, formalised processes for delegating work provided a scaffold upon which local information and communication was grafted. Following the allocation of work, individuals or teams would become responsible for specific activities which they would then follow through to completion. Work practices drew on a mixture of organization-specific procedures and the reflective application of professional knowledge, and allowed for a degree of individual initiative and spontaneity. As Luke put it, it was possible to say, *‘Oh, I know how we can do this. Let’s just go and do it now!’*. This way of organizing was recognizably a ‘negotiated order’ (Strauss, 1978), in which order is achieved through continual negotiations framed by both formal and informal rules and procedures. As Luke also commented, it was partly reliant on information that was anecdotal and idiosyncratic, and dependent on the skills and knowledge of individual workers (e.g. their ability to recognize information as anecdotal).

The creation of FirstService: entering Troy House

Shortly after FirstService was set up, staff now defined as providing shared, back office services were moved to new office accommodation in Troy House. This building was structured simply as an open shell with three floors of large, open plan offices, each accommodating approximately 240 staff. Two features of the environment in Troy House were immediately striking. First, every available vertical surface (walls, columns, doors, filing cabinets) was adorned with multiple copies of three posters, advertising the *‘Priorities for Change’*, *‘New People Survey’* and *‘Our Vision and Values’*. The ‘Values’ were a mixture of statements which were oriented towards commercial success (e.g. *‘We are building a business that is delivering continuous compound growth and exceeding all expectations’*) and personal commitment (e.g. *‘At the close of every day, every member of FirstService says, “I have made a contribution, I am fulfilled by my work”*). Many informants expressed scepticism about the content of these values, apparently regarding them as superficial and lacking in credibility. The fact that ‘values’ had been issued without consultation with the staff also provoked several expressions of disapproval. However, the new staff members who had joined from the defunct energy company, X-En, appeared much more positive. As one of them said in informal conversation, he enjoyed the ‘buzz’ in Troy House, and found other Council offices *‘dead’*.

The second striking feature of the workspace was the homogeneity of the huge open plan floorplates, in which a simple desk/phone/PC ‘unit’ was replicated hundreds of times. This spatial arrangement was portrayed by the

workspace managers as offering distinctive opportunities for organizational flexibility. As Caroline (WIT manager) suggested:

*The building is never fixed - you can always make it work more efficiently. We can significantly reduce property costs because we can crunch more people in, and by stacking efficiently. We can organise project teams ... or we could say it should be entirely flexible and have admin staff in one place and then everyone else hot-desks, so no zones for specialist functions at all. It's completely fluid, it just wouldn't have been possible in traditional space. But we are breaking people's ownership of their space, which some people are not comfortable with - it's **a** space, not **your** space.*

This account from the WIT is included because it gives an indication of the strong official interest in organizational flexibility that prevailed at the time. Caroline's account suggests that it was now possible to knock down the organization structure and rebuild it anew without any impedance arising from employees' ownership of space. Thus, WIT members appeared to regard the office space in Troy House as a grid upon which employees could rapidly be configured and reconfigured, thereby facilitating the re-patterning of the roles which Kallinikos (2004) argues are the fundamental constituents of modern organizations.

Generic services, business processes and non-inclusive roles

To convert specialist to generic services, consultants employed by Telecom redefined work tasks as business processes inscribed on the organization's information system. Work was then performed by following precisely the instructions the processes represented, and new job roles were created which equated with specific sets of business processes. Work was allocated automatically, based on the available hours showing for each employee, and was undertaken and managed primarily through this system. Ross (Finance Manager) described the new way of working:

I think you need to be someone who can be, for the working day, very process driven. You are told you have three hours of time within 20 days to write this document and then we put this document to somebody else. If that's in your nature you're going to be OK. If it's not in your nature you need to be able to play at doing that.

For some staff, the shift to the process model coincided with a marked specialization of their role. For example, some HR staff were allocated responsibility for just one aspect of recruitment (such as requesting references), so that this single task became their job. These staff suggested that their professional knowledge had been

truncated, as whole task areas disappeared from their work and the corresponding bodies of knowledge lay fallow. And because most communication now took place via the IT system, several people spoke of a decline in their interpersonal skills. As one informant said, *'you start to lose, for me anyway, I start to lose a lot of the personal skills that are involved'*.

The timing of work, including deadlines, was specified within the business processes. Deadlines corresponded to the Service Level Agreements (SLAs) that had been agreed between FirstService and the local authority client, and were also built into FirstService's objective to return a profit within the contract period, and were thus immovable. This was associated with occasional spikes of anxiety for some employees. As Emily (HR consultant) suggested, *'in five days we have to do it, it doesn't matter what happens, we **must** issue those contracts or there are financial penalties, and that pressure is huge'*. Working via the new system also seemed to introduce a different everyday time-awareness. As Alex (Business Analyst, IT) said:

You have to be able to account for every minute of what you do. And you're doing that to a machine. For instance here, while I am sitting here, I'm not actually making any money, alright?

Interviewer: *No, you're not.*

And I will be recording that as what's called non-productive time. So ... and when you get reminded of that all the time, you behave in a different way. And then you see around you a world that is designed around making the optimum use of you as a unit of money making.

Information systems channel specific values at the same time as they regulate work (Bloomfield and Hayes, 2009; Kallinikos 2006b). The predominant value put across by FirstService's system appeared to be a meticulous awareness of time and its financial value.

Adapting and reshuffling roles

While the content of some job roles narrowed and appeared relatively stable, others became more labile. Both the content and timing of work could be changed at short notice, as Ross (Finance Manager) stated:

You need to be able to ... very fast, understand areas of work that you've not been exposed to before. And processes change every day almost. So one day you could be writing a document with these headings, and the next day you could be writing a document with completely different headings and

being asked to do it in a completely different way, and in a completely different timeframe, because they're trying to evolve the processes. And that change you have to accept as a worker.

Only the consultants were able to define and change work processes, and it appeared to be normal practice for them to do so without informing the relevant employees. From the perspective of these employees, non-inclusive roles could be instantly modified – part of their reversibility, in Kallinikos' (2004) terms. While the staff had to accept swift change and deal with new areas of work 'very fast', managers could bring about organizational change easily, without having to retrain, consult, or interact with staff members.

There were also instances of more radical changes, in which staff were unexpectedly allocated new packages of processes which shifted their job role into an entirely new professional area. An example of such a change was described by Emily (HR Consultant):

Some people were working in Training and woke up one Monday morning to find they weren't trainers any more, they were actually Business Analysts, they had no experience of business analysis and were just moved. People were moved.

Interviewer: How curious; that's very odd.

Yes. And this is the area you will be sitting in, and this is the type of work ... you know, go on, be gone.

In this episode, Business Analyst roles were replicated and Training roles deleted - exploiting the mobile and reversible characteristics of non-inclusive roles. Indeed, it appeared that the principle of reversibility had been taken to lengths which many informants found surprising (as did the researcher) because they had assumed that theirs were professional roles, requiring distinctive bodies of knowledge and experience which could only be built up over time. The staff whose roles had abruptly changed in this way sought assistance from their colleagues in Learning and Development, who in turn expressed disquiet about the process, suggesting that 'they had had no training and were just slotted in ... [this was] flexibility of the worst possible kind'. Official documents framed the issue differently, as staff having 'the opportunity to work on a wider range of services'. As Kallinikos (2003) argues, this sort of change is made possible through 'standardization of work content that renders the execution of work independent of the skills and abilities of particular people' (p. 598).

As Emily stated, the reassembling of job roles had already been done by the time that the employees affected were informed, so that for them, the change appeared instantaneous. Her account also implies that because instantaneous change was possible, the managers then *expected* instantaneous compliance and did not welcome

any delay introduced by employees inclined to question the change. Such delay, emanating from ‘the languid process of personal or psychological reorientation’ (Kallinikos, 2004, p. 27) could be presumed by managers executing the change to relate to the non-role part of the human being and thus be irrelevant to the ‘correct’ performance of work.

Permanent deletions: the redundancy exercise

During the second period of fieldwork, a redundancy exercise took place in FirstService in which thirteen members of the IT Division were laid off. The manner in which the redundancies were made led to widespread expressions of shock and disgust in both FirstService and WCC. This reaction related to the lack of any advance warning of the job losses, the place and manner of the announcement, and the inclusion among those made redundant of an employee whose wife had died unexpectedly the previous year from cancer. Following this event, a new phrase began to circulate which described the ‘new culture’ in FirstService as ‘*easy in, easy out*’.

Those selected for redundancy were informed by CMT members in a glazed meeting room, in view of some of their colleagues, before being returned to their desks under security escort, where they were required to log off their computers and collect personal belongings before leaving the building (the staff spent their notice periods at home). Their passwords on the computer system were then immediately changed so that they would never be able to log on again. Luke spoke of his experience as a member of the group which was spared redundancy:

It was an absolutely appalling piece of people management. We were herded into different rooms dependent on whether we were going to be OK or not. That was how it was done. And they were OK about it, the senior managers were OK about it. It was handled so badly. There was never any time to prepare for it, it was just done within hours, literally. You know, you were happy at 9am and you were redundant ... well, you were, whatever they called it, released back to WCC at 1pm. And you didn't know at 9am that that was going to come. ... And you were escorted off the premises. Leave now, don't clear your desk, just go now.

As with the shift in roles from Trainers to Business Analysts, the redundancies were announced without notice. Luke's account also indicates the apparent impersonality of the process, which the senior managers seemed to treat as ordinary, everyday work. FirstService responded to a modulated expression of concern from the union about the process with an official statement that ‘*FirstService management were anxious to ensure the most effective and acceptable regime consistent with security*’. Because the staff were seconded to FirstService rather

than being employed directly by the new company, in the official process they were ‘released back’ to the local authority, which in turn executed the redundancies because there were no longer any back office job roles in this part of the organization.

Consequences: quality of services, resistance, workarounds and commitment

Promotional literature for FirstService produced by the new company, WCC and Telecom, indicated that both the quality and volume of services provided were high. FirstService also won an award for ‘joined up’ services in a national e-government competition. However, a report prepared by another authority which was considering adopting the same model, and which had closely scrutinized this arrangement, suggested that although there was a ‘*culture of delivery*’ in FirstService, its performance indicators provided no information about outcomes. It also noted that 50% of the staff had expressed a preference to return to the local authority, and that staff development was limited to ‘*transactional services*’. In line with this more critical appraisal, both FirstService employees and their clients in the local authority suggested that the quality of services had declined when the back office model was adopted. FirstService was informally labelled ‘*WorstService*’ and Troy House was referred to as ‘*The Dark Side*’. Although the new model had officially decoupled FirstService staff from the relationships formed through specialist working, they were still loosely connected by the new contractual arrangement and still had informal contact with each other through physical proximity. This made the apparent decline in quality an awkward issue. As Becky (HR Consultant) put it: ‘*I think maybe because some of us are the same people, it’s like ‘we’ve been seeing your face for quite a long time actually, so why are the people behind it all making cock-ups?’*’ At a senior management ‘roadshow’, one employee ventured a polite complaint: ‘*You have excellent people but you can’t get past the helpdesk and you might then get someone who doesn’t understand your service or your language*’.

FirstService employees commonly attributed the decline in quality to the SLAs that had been agreed with the local authority client. Faisal (Business Analyst, IT) suggested:

I think there’s a lot of blame culture between the organizations as well, so it’s like ‘oh them over there, over the road, the Dark Side, WorstService’. We get told that repeatedly ... But what they don’t understand is that all of their senior management have bought into this entire model, so anything that’s shortcoming, someone back there needs to think about what they asked for and how they asked for it,

and how much money they wanted to save, and whether that was realistic.

When the move to FirstService took place, there were few expressions of resistance and there was no union opposition. However, several informants expressed private criticisms of the shift to a profit orientation. Just as Hebson, Grimshaw and Marchington (2003) found, they continued to identify with the Council and its public service ethos. Some staff confessed that they put this principle into practice by working in a way that saved money for the Council, rather than trying to make money for FirstService. As Gita (Finance) stated:

I think to be fair to FirstService what they've always tried to say is that what we're bringing to the surface now is what it always did cost to run services. If you're a WCC employee I guess you just work, and if somebody calls you for a meeting you just go. Whereas working for FirstService you say well if I go to that meeting, it's going to cost £341. And I've actually not gone to meetings in order to save WCC some money.

Certain senior managers within the local authority openly expressed stronger criticisms, suggesting that the generic services were harder to access, and their quality was unsatisfactory. This dissatisfaction seemed to lead to an interesting workaround by these customers. Towards the end of the fieldwork, some directorates had reclaimed ownership over parts of their back office provision by recreating service posts within their directorate. For example, one directorate successfully argued the case for recreating its own training and organization development team. Employees performing service work which was directly managed by the local authority in this way, appeared relieved. As Julie (Libraries and Heritage, WCC) stated:

Christina wanted somebody within her directorate, who can help to ride through that agenda within the directorate. And I thought 'fantastic, I'm able to do OD work and I'm able to stay within the Council, I don't have to go to FirstService'. Which have a lot of processes and procedures that I hate working with.

Others 'resisted' by leaving the organization. Turnover was particularly high among staff whose roles had become very specialized. Several managers who had formerly worked for the authority also left, including one senior HR manager who quit her job without notice. The gradual attrition of former local authority workers appeared to be compensated by recruitment from the external labour market, notably X-En. A limitation of our study is that there were no formal interviews with this new but growing group of staff. However, accounts from

some seconded employees suggested that the new recruits stood out as a ‘type’, as Frances (Learning and Development Consultant) described: ‘*The ideal recruit, I can tell you, is about 35, male and wears a suit ... if female, snappy dresser, well-groomed, immaculate makeup*’. Externally recruited staff also appeared to be highly committed to the new organization, as Frances continued:

Very much company people, people who will quite happily lay down their family lives for the good of the organisation, to the extent of staying here till eight or nine o'clock which I won't do, for any reason. I fear it's something that's sneaking in ... I certainly fear it with my boss. He's a young father, he's got a little boy not even two yet and he'll say things like, 'oh, got in trouble with my wife last night cause I didn't get home till nine o'clock', and I'm like, 'why? Why did you not go home until nine o'clock? What is so important that you can't put your son to bed?'

Long hours working was prevalent in the local authority, particularly among managers. This was generally understood to result from a combination of heavy workloads, pressure to meet official targets and the employees' own commitment to the needs of their service users and the public in general. While working late was not in itself noteworthy, it acquired a different meaning in the context of FirstService and its distinctive profit ethos. Thus, there seemed to be a dichotomy between the secondees and the new staff, in terms of their apparent commitment to the organization, the model of working it adopted, and the labour market they associated with.

Discussion

We have analysed the change in FirstService from specialist to generic services, in which the definition and management of work as modular was suddenly intensified. Modern people are already modular and job roles are already non-inclusive, although these features have been relatively unexamined (Kallinikos, 2003). As Gellner (1994) remarks, it is ‘the non-conflation of issues, the separation of the social strands, which makes society non-rigid’ (p. 103). In the following discussion, we first characterize the form of non-rigidity that was constituted in FirstService, and then identify some of the social strands that had become more clearly separated, and which flexibility depended upon. Finally, we consider the case in its wider context and related empirical evidence, and argue that the shift in FirstService to a more stringent treatment of roles as non-inclusive and modular may be part of a wider trend.

In FirstService, transposing work onto software-based business processes enabled the organization to be construed as a totality of modular job roles, each composed from sets of smaller task modules. The design of work was ‘considerably modular and granular’, exactly as Kallinikos (2011a, p. 135) describes. This modular design made the organization configurable, by enabling: the modification or specialization of roles; the switching of roles by deleting and replicating them, and detaching and reattaching employees accordingly; and the permanent deletion of roles and ‘release’ of employees. This form of flexibility is perhaps different from the normal usage of the term in organization studies. A rod that is flexible will bend, but will then return to an approximation of its original shape once the stress has been removed. Modular flexibility is more akin to the process of arranging identical building blocks into a three-dimensional shape, which can always be knocked down and made into an entirely new shape. We have called this characteristic ‘configurability’. This admittedly inelegant word seems to sum up this form of change better as it implies the presence of a human designer and the pre-existing objects which he or she arranges and re-arranges.

Those whose roles diversified and crossed professional boundaries had to develop what Gellner (1994) calls ‘real modularity’, becoming ‘highly variable, not to say volatile, in [their] activities ... capable of performing highly diverse tasks in the same general cultural idiom’ (p. 102). The framing of employees as generic resources which could be applied to almost any predefined task enhanced the organization’s capacity for adaptability and cost reduction. As Marsden (1999) has argued, employers already possess considerable scope for flexibility by varying the content of jobs within the area of acceptance (Simon, 1951). This flexibility was expanded further in FirstService by disregarding the area of acceptance. Treating staff as generic resources enabled them to be pooled, rather than being contained within rigid professional boundaries. The creation of a pool of general staff could potentially enable staff numbers to be reduced while maintaining a workforce capable of responding to a wide variety of demands.

The expectation that staff should be able to follow processes competently, regardless of their content, shifted employees’ relationship to the skills and knowledge they had banked through formal education and accumulated occupational experience. In terms of the dual expertise that many staff possessed, it was clear that they would lose their directorate specialization, because the replacement of specialist with generic services was an explicit objective of the new organization. The shift in the relationship to their profession as expert HR, finance or IT practitioners appeared to be unexpected, however. For those whose work narrowed, their knowledge of activities outside their newly defined role lay fallow. For the staff who were switched from one professional

area to another, their previously acquired professional knowledge suddenly lost its value as they were moved onto entirely new task areas. Kallinikos (2003) describes the ‘solid individual’ (p. 600) steadily filling up with knowledge, skills and sensibilities distilled from a variety of lifetime experiences. But deploying people only on the basis of their professional specialisms limited the uses to which they could be put, which we could see as too inflexible and reminiscent of the old *Gemeinschaft* sticky bonds. Hence, the relationships between individual staff and both strands of their dual expertise had to be loosened, or decoupled, to enable the scope for non-rigidity to be extended.

Time appeared to be used intensively in FirstService. Rapid change was a recurrent feature, whereby employees had to be able to quickly understand and work to new processes, or might arrive at work to find that their role had changed completely, or had been deleted altogether. Similarly, the official ‘values’ were issued without prior consultation, and senior managers declined to be interviewed because this would create non-productive time. Intensified time pressure appeared to be associated with the cost pressure that came from the organization’s SLAs, and ultimately, the imperative to recover the initial investment and make a profit within the limited lifetime of the contract. As Rämö & Skålén (2006) also observe, a common denominator of public sector reforms is their constant focus on cutting time in ventures, such that speed is ‘the imperative in virtually every NPM idea’ (p. 516). Modularity speeds up organizational change because it bypasses slow processes of personal reorientation (Kallinikos, 2003). A consequence of the intense cost and time pressures in FirstService was that switching between the modules that composed the job had to be accomplished at remarkable speed. As Gellner himself might have put it: Modular Man does not spend time non-productively! He switches instantaneously between the different compartments of activity he is responsible for!

Although shared services appeared to reduce cost, the shift from a specialist to a shared service model seemed to strain FirstService’s relationships with its local authority customers. Individuals receiving services may have been unaware of the constraints arising from the SLAs that had been made, and were perhaps expecting the high engagement, low rationalization type of services (Bélanger and Edwards, 2013) to which they were accustomed. As Kallinikos (2003) observes, however, as well as enabling employees to respond to the demands of the workplace, the organization’s relationship with other agents must also be designed and guided along modular paths. To return to Gellner’s furniture metaphor, it is difficult to achieve a coherent and aesthetically pleasing result by combining ordinary (non-modular) and modular furniture. The two styles are not practically or stylistically compatible, and attempts to combine them may end up as an ‘eclectic, incoherent mess’ (p. 97).

Therefore, in order to create the relationships through which adequate, quick and impersonal services can be provided, modular service providers need to engage with modular customers. This type of transaction gives everyday life its frictionless quality. In our case, however, some of the local authority managers found modular services wanting, and sought to recreate the local, specialised, sticky relationships that they had come to rely on. Strict separation of role from person seemed most evident in the redundancy exercise. As we have tried to show, FirstService managers transacted with employees as non-inclusive roles, and it is this separation which enables 'the de-emotionalization of social action' (Kallinikos, 2003, p. 610). The redundancy exercise, including the selection of the recently bereaved man for redundancy, can then be seen as the rational deletion of particular roles that were no longer required. It appears as a clear demonstration of the managers' capacity for single-stranded thinking, including 'massive methodological bracketing where only very specific information is considered pertinent and all the rest is viewed as extraneous' (Haugaard, 2007, p. 94). However, the way that the redundancy exercise was handled, and the wave of revulsion that it seemed to trigger, indicate some contradictions associated with this attempt at extreme de-emotionalization. The announcement of the redundancies without advance warning and using security guards suggest that CMT managers suspected that the commitment they had sought had not been achieved for this group of workers, and that it was felt necessary to back up the process with force. Particular risks arose because some of the staff had extensive privileges on the IT system and could, in principle, have sabotaged it. As Haugaard (2007) argues, coercion and disciplinary power always coexist, and regimes which resort to violence have to do so because social power is weak. FirstService's control over the process using security guards implied the expectation of violence, because physical force would only be necessary if managers anticipated that calm reasoning would not on its own prevent violence. Ironically, the deployment of security personnel further heightened emotions, among both FirstService and local authority staff, in a situation which appeared to be designed to eliminate them.

Conclusion

We have considered the consequences of the modular design of work brought about by informatization. To paraphrase Nardi (2011, p.xi), redefining work as software-based processes cultivates and brings forth a more pronounced modular form of agency. This more modular way of working involved the ability to move specialized knowledge to the background, follow defined processes and be able to switch quickly from one type of 'content' to another. These capacities had to be applied in a time-efficient way, with strict emotional

separation from the non-work needs and circumstances of themselves and their colleagues. We do not conclude that informatization necessarily changes people in a profound or enduring fashion because we have not studied their non-work lives and because it is possible to ‘play’ at process-based working without being fundamentally affected by it, as one of our informants astutely noted. Equally, it would be an assumption to suggest that modular working is not internalized, and the establishment of a group of staff who appeared to regard it as normal implies that this is possible. These employees were accustomed to working with business processes, and on joining FirstService, could probably anticipate that there were career advancement pathways which capitalized on the modular skills they already possessed, and that successful performance in the job would be rewarded by career promotion (Watson, 1982). This also implies the existence of a labour market for people with generic business process skills, able to make transitions between apparently divergent functions (such as energy supply and shared services).

The informatization of service work is continuing extensively in the public and private sectors. To what extent might the changes we observed in FirstService typify wider developments? As we stressed earlier, it is not possible to generalize using a simple ‘case-to-population’ logic (Yin, 2013), but it is also wrong to treat the outcomes of public sector reforms as if they are isolated incidents (Bejerot and Hasselbladh, 2013). The question of whether informatization makes organizations configurable and cultivates more modular forms of agency at work in other concrete situations can only be answered empirically, but we will sketch out what appear to be key features of this case and its relationship to its wider political, economic and organizational contexts.

Although certain features of the case may be unique (such as the secondment, rather than the employment of local authority staff), others seem more likely to be recurrent across contexts. The organizational template for ‘business process outsourcing’ (Grimshaw et al, 2005) used in FirstService is firmly established, as is the capability for complex professional work to be informatized (Kallinikos, 2006b). The economic and political context was marked by strong pressure to control costs, and minimal union, political or public opposition to cuts in local government, particularly if they could be made to apply only to back office rather than frontline services. Although these contingencies are particular to the present time in the public sector, they appear to be enduring.

As Bélanger and Edwards (2013) argue, rationalization is a tendency in capitalism, but one which can be counteracted. They cite the example of nursing, which has resisted many attempts at standardization. The high

variability in patients' needs means that standardization carries serious risks as well as benefits, and the voices of dissatisfied patients 'count'. In contrast, FirstService's customers in the local authority had little 'clout'. Other professions which lack high degrees of professional autonomy, and where service users' needs are relatively predictable and carry low risks, may be judged 'in terms of clearly defined criteria of efficiency, and nothing else' (Gellner, 1994, p. 99) and 'modular management' appears to be a distinctive future possibility.

References

- Alvesson, M. & Deetz, S. (2000). *Doing critical management research*. London, UK: Sage.
- Bain, P. & Taylor, P. (1999). 'An assembly line in the head: Work and employee relations in the call centre'. *Industrial Relations Journal*, 30, 2, 101-117.
- Baldry, C. (2011). Editorial: Chronicling the information revolution. *New Technology, Work and Employment*, 26, 3, 175-182.
- Bejerot, E. & Hasselblad, H. (2013). Forms of intervention in public sector organizations: Generic traits in public sector reforms. *Organization Studies*, 34, 9, 1357-1380.
- Bélanger, J. & Edwards, P. (2013). The nature of front-line service work: Distinctive features and continuity in the employment relationship. *Work, Employment and Society*, 27, 3, 433-450.
- Bloomfield, B.P. & Hayes, N. (2009). Power and organizational transformation through technology: Hybrids of electronic government. *Organization Studies*, 30, 5, 461 – 487.
- Brocklehurst, M. (2001). Power, identity and new technology homework: Implications for 'new forms' of organizing. *Organization Studies*, 22, 3, 445-466.
- Cabinet Office (2011). Government Shared Services: A Strategic Vision – July 2011. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/61166/government-shared-services-july2011.pdf, accessed September 20th, 2013.
- CBI (2012). A problem shared ... realising savings through shared services. www.cbi.org.uk/media/1534060/2011906_a_problem_shared.pdf, accessed September 20th, 2013.
- Clarke, J. & Newman, J. (1997). *The managerial state: Power, politics and ideology in the remaking of social welfare*. London, UK: Sage.
- Courpasson, D. & Reed, M. (2004). Introduction: Bureaucracy in the age of enterprise. *Organization*, 11, 1, 5-12.

- du Gay, P. (2000). *In praise of bureaucracy: Weber, organization, ethics*. London, UK: Sage.
- Edwards, P. (2003). The future of industrial relations. In P. Ackers & A. Wilkinson (Eds.), *Understanding work and employment: Industrial relations in transition* (pp.337-358). Oxford, UK: Oxford University Press.
- Eriksson-Zetterquist, U., Lindberg, K. & Styhre, A. (2009). When the good times are over: Professionals encountering new technology. *Human Relations*, 62, 8, 1145-1170.
- Faulkner, P. & Runde, J. (2012). On sociomateriality. In Leonardi, P.M., Nardi, B.A. & Kallinikos, J. (Eds.), *Materiality and organizing: Social interaction in a technological world* (pp.49-66). Oxford, UK: Oxford University Press.
- Gellner, E. (1994). *Conditions of liberty: Civil society and its rivals*. London, UK: Penguin.
- Gläser, J. & Laudel, G. (2013). Life with and without coding: Two methods for early-stage data analysis in qualitative research aiming at causal explanations. *Forum: Qualitative social research*, 14, 2, article 5.
- Gold, R. (1958). Roles in sociological fieldwork. *Social Forces*, 36, 217-23.
- Grimshaw, D., Marchington, M., Rubery, G. & Willmott, H. (2005). Introduction: Fragmenting work across organizational boundaries. In M.P. Marchington, D. Grimshaw, J. Rubery & H. Willmott (Eds.), *Fragmenting work: Blurring organisational boundaries and disordering hierarchies* (pp.1-32). Oxford, UK: Oxford University Press.
- Grimshaw, D., Vincent, S. & Willmott, H. (2002). Going privately: Partnership and outsourcing in UK public services. *Public Administration*, 80, 3, 475-502.
- Gubrium, J.G. & Holstein, J.A. (1997). *The new language of qualitative method*, New York: Oxford University Press.
- Hartley, J.F. (1994). Case studies in organizational research. In C. Cassell & G. Symon (Eds.), *Qualitative methods in organizational research: A practical guide* (pp.208-229). London, UK: Sage.
- Haugaard, M. (2007). Power, modernity and liberal democracy. In Siniša Malešević & Mark Haugaard (Eds.), *Ernest Gellner and contemporary social thought* (pp.75-102). Cambridge, UK: Cambridge University Press.
- Head, S. (2003). *The new ruthless economy: Work and power in the digital age*. Oxford and New York: Oxford University Press.
- Hebson, G., Grimshaw, D. & Marchington, M. (2003). PPPs and the changing public sector ethos: Case-study evidence from the health and local authority sectors. *Work, Employment and Society* 17, 3, 481-501.
- Hislop, D. & Axtell, C. (2007). The neglect of spatial mobility in contemporary studies of work: The case of telework. *New Technology, Work and Employment*, 22, 1, 34-51.
- HMSO (2004). Releasing resources to the front line: Independent review of public sector efficiency. www.hm-treasury.gov.uk, accessed September 1st, 2013.
- Hoggett, P. (2005). A service to the public: The containment of ethical and moral conflicts by public bureaucracies. In P. du Gay (Ed.) *The Values of Bureaucracy* (pp.165-190). Oxford, UK: Oxford University Press.
- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69, 3-19.
- Howcroft, D. & Richardson, H. (2012). The back office goes global: Exploring connections and contradictions in shared service centres. *Work, Employment and Society*, 26, 1, 111-127.

Hyman, R. (1997). Strategy or structure. *Work, Employment and Society*, 1, 25-56.

Kallinikos, J. (2003). Work, human agency and organizational forms: An anatomy of fragmentation. *Organization Studies*, 24, 4, 595-618.

Kallinikos, J. (2004). The social foundations of bureaucratic order. *Organization*, 11, 1, 13-36.

Kallinikos, J. (2006a). *The consequences of information: Institutional implications of technological change*. Cheltenham, UK and Northampton, MA, USA: Edward Elgar.

Kallinikos, J. (2006b). The institution of bureaucracy: Administration, pluralism, democracy. *Economy and Society* 35, 4, 611-627.

Kallinikos, J. (2009). On the computational rendition of reality: Artefacts and human agency. *Organization*, 16, 2, 183-202.

Kallinikos, J. (2011a). Bureaucracy under siege: On information, collaboration, and networks. In S. Clegg, M. Harris & H. Höpfl (Eds.), *Managing modernity: Beyond bureaucracy?* (pp. 132-156). Oxford, UK: Oxford University Press.

Kallinikos, J. (2011b). *Governing through technology: Information artefacts and social practice*. Basingstoke, UK: Palgrave Macmillan.

Kallinikos, J., Hasselbladh, H. & Marton, A. (2013). Governing social practice: Technology and institutional change. *Theory and Society*, 42, 395-421.

Kallinikos, J., Leonardi, P.M., & Nardi, B.A. (2012). The challenge of materiality: Origins, scope, and prospects. In Leonardi, P.M., Nardi, B.A. & Kallinikos, J. (Eds.), *Materiality and organizing: Social interaction in a technological world* (pp.3-24). Oxford, UK: Oxford University Press.

Labatut, J., Aggeri, F. & Girard, N. (2012). Discipline and change: How technologies and organizational routines interact in new practice creation. *Organization Studies*, 33, 1, 39 – 69.

Leonardi, P.M. & Barley, S. (2010) *What's under construction here?* Academy of Management Annals, 4, 1, 1-51.

Leonardi, P.M. (2012). Materiality, sociomateriality and socio-technical systems: What do these terms mean? How are they different? Do we need them? In P.M. Leonardi, B.A. Nardi & J. Kallinikos (Eds.), *Materiality and organizing: Social interaction in a technological world* (pp.25-48). Oxford, UK: Oxford University Press.

Marsden, D. (1999). *A theory of employment systems: Micro-foundations of societal diversity*. Oxford, UK: Oxford University Press.

Marsden, D. (2004). The 'Network Economy' and models of the employment contract. *British Journal of Industrial Relations*, 42, 4, 659-684.

McNulty, T. & Ferlie, E. (2004). Process transformation: Limitations to radical organizational change within public service organizations. *Organization Studies*, 25, 8, 1389-1412.

Nardi, B. (2011). Foreword. In Kallinikos, J. *Governing through technology: Information artefacts and social practice* (pp. x-xiii). Basingstoke, UK: Palgrave Macmillan.

Newman, J. (2002). *Modernising governance: New Labour, policy and society*. London, UK: Sage.

Orlikowski, W.J. & Yates, J. (2002). It's about time: Temporal structuring in organizations. *Organization Science*, 13, 6, 684-700.

- Orlikowski, W.J. (2007). Sociomaterial practices: Exploring technology at work. *Organization Studies*, 28, 9, 1435-1448.
- Rämö, H. & Skåhlén, P. (2006). Time and space in New Public Management reform: The case of geriatric care. *International Journal of Public Sector Management*, 19, 5, 513-525.
- Rawls, A. W. (2008). Harold Garfinkel, ethnomethodology and workplace studies. *Organization Studies*, 29, 5, 701-732.
- Rubery, J. & Grimshaw, D. (2001). ICTs and employment: The problem of job quality. *International Labour Review*, 140, 2, 165-192.
- Rubery, J., Ward, K., Grimshaw, D. & Beynon, H. (2005). Working time, industrial relations and the employment relationship. *Time and Society*, 14, 1, 89-111.
- Russell, B. (2009). *Smiling down the line*. Toronto: University of Toronto Press.
- Ryan, K. (2007). Truth, reason and the spectre of contingency. In Siniša Malešević & Mark Haugaard (Eds.) *Ernest Gellner and contemporary social thought* (pp.227-252). Cambridge, UK: Cambridge University Press.
- Schwarz, H. (2003). Mobile workplacings: Office design, space and technology. In C. Garsten & H. Wulff (Eds.), *New technologies at work: People, screens and social virtuality* (pp.91-118). Oxford, UK: Berg.
- Seddon, J. (2008). *Systems thinking in the public sector*. Axminster, UK: Triarchy Press.
- Simon, H.A. (1951). A formal theory of the employment relationship. *Econometrica*, 19, 3, 293-305.
- Snellen, I. (2005). E-government. In E. Ferlie, L.E. Lynn & C. Pollitt (Eds.), *The Oxford Handbook of Public Management* (pp. 398-421). Oxford, UK: Oxford University Press.
- Strauss, A. (1978). *Negotiations: Varieties, contexts, processes, and social order*. San Francisco, California: Jossey Bass.
- Van Maanen, J., Sørensen, J.B., and Mitchell, T.R. (2007). The interplay between theory and method. *Academy of Management Review*, 32, 4, 1145-1154.
- Watson, T. (1994). *In search of management*. London, UK: Routledge.
- Watson, T.J. (1982). Group ideologies and organizational change. *Journal of Management Studies*, 19, 3, 259-275.
- Watson, T.J. (2009). Work and the sociological imagination: The need for continuity and change in the study of continuity and change. *Sociology*, 43, 5, 861-877.
- Watson, T.J. & Watson, D.H. (2012). Narratives in society, organizations and individual identities: An ethnographic study of pubs, identity work and the pursuit of 'the real'. *Human Relations*, 65, 6, 683-704.
- White, M., S. Hill, C. Mills & D. Smeaton (2004). *Managing to change? British workplaces and the future of work*. Basingstoke, UK: Palgrave Macmillan.
- Yin, R.K. (2013). Validity and generalization in future case study evaluations. *Evaluation*, 19, 3, 321-332.

